TO: MEQB Members and

**Technical Representatives** 

FROM: David Birkholz (651-296-2878)

Alan Mitchell (651-296-3714) Energy Facility Permitting

**RE:** Decision on Site Permit for Trimont Wind I, LLC for a 100.5-

Megawatt Large Wind Energy Conversion System in Jackson and

Martin Counties (EQB Docket No. 03-72-LWECS-Trimont)

**Action:** The Board is asked to issue a site permit to Trimont Wind I, LLC (Trimont) for a 100.5-Megawatt Large Wind Energy Conversion System (LWECS) in Jackson and Martin Counties.

**Background:** On March 12, 2004, Trimont Wind I, LLC (Trimont) submitted an application to the EQB for a site permit to construct, operate, maintain, and manage a 100.5-Megawatt (MW) nameplate capacity Large Wind Energy Conversion System and associated facilities in Martin and Jackson counties.

Trimont Wind I, LLC is a wholly-owned affiliate of PPM Energy, Inc., of Portland, OR. Trimont has partnered with Trimont Area Wind Farm, LLC, comprising local landowners that have a financial interest in the project in addition to leasing their wind rights to Trimont.

**The Project:** The proposed Trimont Project will consist of up to 67 wind turbine generators mounted on freestanding tubular towers. The turbines will have an output capacity of 1.5 MW or slightly larger. The project area is 22,400 acres over 35 sections in Martin County and Jackson County. Other components of the project include a concrete and steel foundation for each tower, pad-mounted step-up transformers, all-weather class 5 roads of gravel or similar material, underground electric energy collection system, and an overhead 34.5 kV feeder system.

The energy from the proposed 100.5 MW project will be delivered to Xcel Energy's Martin County substation located in section 19 of Cedar Township in Martin County, within the project boundaries. Trimont has an agreement with Great River Energy to purchase the electricity generated.

**Map of Project Boundary:** Attached to this memorandum is a map showing the proposed site permit boundary for this project and the anticipated locations for the 67 turbines.

**Procedural Requirements:** The site permit application has been reviewed pursuant to the requirement of Minnesota Rules Chapter 4401 (Wind Siting Rules). A list of procedural documents establishing compliance with the requirements of chapter 4401 has been prepared and these documents are referenced in the proposed Findings of Fact. The staff can make any of these documents available to a Board member upon request, and copies will be available at the Board meeting.

The rules provide opportunities for the public to participate in deliberations on LWECS permit applications. The public was advised of the submission of the permit application promptly after the application was received, a draft site permit on the project was provided for the public and the applicants to review, the public was afforded a period of time to submit written comments, and a public meeting was held in Trimont, in Martin County, on May 10, 2004. About 15 people showed up at the public meeting, and EQB staff and representatives of the Permittee were available to answer questions.

Two agencies, (the Minnesota Department of Natural Resources and Southwest Regional Development Commission) submitted written comments on the project. Both agencies support issuing a permit for the project. The DNR requested a 180-meter setback from any grassland nesting areas or any wetlands and the applicant has agreed to do that.

One individual submitted a comment expressing concern about the density of development and the possibility of shadow flicker from the turbines. (Shadow flicker is the casting of a shadow as the blades sweep around, which is primarily a winter time occurrence when the sun is low in the sky and the shadows are long.) The permit does contain a number of setback requirements from roads and residences, which should help to minimize turbine density and shadow flicker. Also, the findings (No. 34) recognize that the EQB will continue to monitor developments regarding shadow flicker.

**Significant Issues:** There are only three changes to the Permit that the Board is asked to approve from what was contained in the Draft Site Permit. These changes have been developed in response to concerns raised by Trimont.

Turbine Spacing. Condition III.E.5. establishes a minimum spacing between turbines of 3 rotor diameters in the crosswind direction and 6 rotor diameters in the downwind direction. As has been the EQB's practice, the permit establishes the rotor diameter separation requested by the applicant. Another setback requirement is found in Condition III.C.3, which provides that no turbine shall be closer than 250 feet from a public road right-of-way. The applicant has informed staff that it has several turbines planned for locations that are 250 feet from the centerline of the closest roadway but not from the edge of the road right-of-way. If Trimont must move the turbines that are closest to the roadways, adjacent turbines will have to be resited to accommodate the 3 X 6 RD separation requirement.

The Permit amendments address this issue in the following manner. Condition III.E.5. is changed to allow Trimont to request of the Chair that it be authorized to site up to 10% of the turbines closer together than the 3 X 6 RD restriction. This will allow Trimont the option of moving the turbine closest to the roadway to ensure separation from the edge of the right-of-way, resulting in less than the required separation from the nearest turbine, but not require Trimont to move all turbines in the string. The reason for delegating this authority to the Chair is to expedite consideration of Trimont's request. If Trimont should require more than 10% of the turbines to be closer than required, Trimont would have to ask the Board to consider a further amendment.

In addition, Condition III.C.3. is amended to clarify that it is the edge of the right-of-way of the road, not the centerline, that establishes the setback requirement. This is the way past permits have been interpreted and this is what was intended. The reason for the road setback is to avoid ice being thrown from the blades onto the roadway in the winter. Findings 83 and 84 address the reasons for these amendments.

Reporting Production Data. One other change from what was included in the Draft Site Permit is found in Condition III.H.2. This is the requirement that the permittee provide the EQB with viewer access to its supervisory control and data acquisition (SCADA) system. This access will allow the EQB to have available data about the performance of each turbine, including data about the electricity generated. The EQB has included this requirement in other permits that it has issued and other permittees have been willing to provide this access. Trimont has raised some concerns about providing the EQB with access to its SCADA system, although it is perfectly willing to provide hard copies of the data. The major concern is whether Trimont will violate any requirements imposed by the federal government or national utility organizations like the North American Electric Reliability Council. Condition III.H.1. contains new language recognizing that Trimont will not be required to provide viewer access if to do so would violate other requirements that Trimont is subject to. Finding No. 85 addresses this issue.

Other Matters of Interest. The Trimont Project is unique in a couple of ways. One, it is the first wind project in Minnesota to involve a financial partnership between landowners and project developers. Landowners in typical wind projects in Minnesota have been merely lessors of their wind rights to an operating company. In this case the landowners are partners in the project.

Second, the Trimont Project is the first project for which the EQB prepared an Environmental Report for the Public Utilities Commission at the Certificate of Need stage, pursuant to the new EQB rules, part 4400.7020. The Minnesota Public Utilities Commission issued its Order granting that Certificate of Need on June 2, 2004.

**Findings of Fact:** This is the ninth wind project to be permitted by the EQB. Most of the findings in the proposed Findings of Fact reflect findings that were made for other projects.

The following outline identifies the major categories of the Findings.

Category <u>Findings</u>

Background and Procedure	(Findings Nos. $1 - 10$ )
The Permittee	(Findings Nos. 11 – 12)
Project Description	(Findings Nos. $13 - 22$ )
Wind Resource Considerations	(Findings Nos. $23 - 27$ )
Land Rights and Easement Agreements	(Findings Nos. $28 - 29$ )
Written Comments	(Findings Nos. $30 - 36$ )
Site Criteria	(Findings Nos. $37 - 80$ )
Site Permit Conditions	(Findings Nos. $81 - 85$ )

**Standard for Permit Issuance:** Essentially the test for issuing a site permit for a Large Wind Energy Conversion System is to determine whether the project is compatible with environmental preservation, sustainable development, and the efficient use of resources (Minnesota Statutes section 116C.693). The findings address the pertinent environmental considerations (such as human settlement, noise, community benefits, and surface water). Also, the law allows the Board to place conditions in LWECS permits (Minnesota Statutes section 116C.694d). Except as described above, the conditions in this proposed permit are essentially the same as those conditions included in the other LWECS permits issued by the Board.

**Staff Recommendation:** The EQB staff recommends issuance of a site permit for Trimont Wind I, LLC, for the site requested, with the appropriate conditions contained in the proposed Permit. A resolution is included that adopts Findings of Fact, Conclusions, and Order and issues a Site Permit for the project to be approved by the board.